

REMARKS

The Office Action of January 19, 2007 presents the examination of claims 1-4, 12-14, 18-24, 28, 34-36 and 46-48, the remaining being withdrawn pursuant to a Restriction Requirement.

Restriction requirement

Claims 5-11, 15-17, 25-27, 92-33, 37-45 and 49-65 stand withdrawn pursuant to restriction. The claims as currently amended all recite as a feature of the invention a polynucleotide that encodes the genome or antigenome of a chimeric RSV that further includes one or more mutations from among the group of mutations included in a set of mutant RSV. In the instances of claims to the virus embodiments, the polynucleotide is the genome or antigenome of the virus. Applicants submit that the claims thus represent a unitary invention within the presently elected restriction group and that there is no undue burden of search imposed by examination of all of the presently pending claims, and therefore the instant restriction requirement should be withdrawn.

Priority claim

The specification is amended by this paper to recite the claim to priority in the manner requested by the Examiner.

Rejection under 35 USC § 112, first paragraph

Claims 1-4, 12-14, 18-24, 28, 34-36 and 46-48 are rejected under 35 USC § 112, first paragraph, for alleged failure of the specification to provide adequate written description of the claimed invention and for lack of enablement. These rejections are respectfully traversed. Reconsideration and withdrawal thereof are requested.

The Examiner asserts that the specification only describes the RNA polymerase elongation factor protein as being one from RSV and encoded by the ORF1 of the M2 gene, and

that only the M2 ORF1 gene product would function as a RNA polymerase elongation factor in the RSV of the invention. The present claims have been amended so as to obviate this rejection.

Rejections based on prior art

Claims 1, 2, 4, 12, 18, 21, 22-24, 35, 36 and 46-48 are rejected under 35 USC § 103(a) as being unpatentable over Clarke '520 in view of Collins et al. (PNAS vol. 92). While Applicants do not particularly agree with the Examiner's position, the claims have been amended to include the feature of claim 13, not among the rejected claims. The remaining independent claims have also been so amended.

Accordingly, the presently pending claims should be found allowable over the cited references.

Claims 1, 2-4, 12-14, 18, 19, 21-24, 35, 36 and 46-48 stand rejected under 35 USC § 103(a) as being unpatentable over Clarke '520 in view of Collins (PNAS vol. 92) and further in view of Murphy '326. This rejection is traversed. Reconsideration and withdrawal thereof are respectfully requested.

Applicants submit that the Examiner fails to establish *prima facie* obviousness of the present invention. In particular, the Examiner is using impermissible hindsight to assemble the present invention from elements of the prior art, using the Applicants disclosure as a template. Such an approach to asserting a case of *prima facie* obviousness is improper and cannot be sustained. *See, e.g. In re Fritch*, 23 USPQ2d 1780 (Fed. Cir. 1992).

Murphy '326 is cited for disclosure of the particular mutant strains recited in claim 13. However, Murphy '326 does not disclose the nucleotide sequence of any of the mutant viruses, and in particular does not provide any description of the particular changes in nucleotide sequence that are to be made in order to introduce the various attenuating point mutations harbored by, for example RSV cpts 248, into a different virus, i.e. one having a chimeric genome or antigenome. That information is critical to implementing the invention of the present application and is provided by the present specification.

Neither Clarke '520 nor Collins (PNAS vol. 92) supply this information. Thus, the combined references cited by the Examiner do not disclose or suggest the present invention and so the instant rejection fails and must be withdrawn.

Claims 1-4, 12, 18, 21-24, 34-36 and 46-48 are rejected under 35 USC § 103(a) as being unpatentable over Clarke and Collins as applied above, in further view of Wertz. This rejection is traversed. Reconsideration and withdrawal thereof are requested.

The present claims incorporate the features of claim 13, not rejected on these grounds, into the independent claims. Thus, the instant rejection is overcome.

Obviousness-type double patenting rejections

Claims 1, 4, 12, 14, 18-24, 28, 35 and 46-48 are rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-4, 12, 14, 18, 20-25, 28 and 31-34 of US Patent 6,689,367. Claims 1-4, 12, 14, 18-24, 28, 35 and 46-48 are rejected under the judicially created doctrine of obviousness-type double patenting over claims 1, 6-8, 23-28, 39, 50, 51 and 59-61 of US Patent 6,713,066. Claims 1, 4, 12, 14, 18-24, 28, 35 and 46-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 63, 77, 78, 87-90, 92, 101, 102 and 109-111 of copending application 10/934,003. Claims 1, 4, 12, 14, 18-24, 28, 35 and 46-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1, 2, 10, 11, 30-37, 46, 47, 57-59, 90 and 91 of copending application 11/033,996. Claims 1-3 are provisionally rejected over claim 1 of copending application 11/097,946. Claims 1, 4, 12-14, 18-24, 34-36 and 46-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1, 2, 11, 30-37, 46, 47 and 57-59 of copending application 11/203,620.

Among these, the 11/033,996 application is abandoned. The subject matter of this application that is deemed obvious over the claims of the 6,689,367 patent was restricted from

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the application that became that patent and so a double-patenting rejection is improper in that instance.

A terminal disclaimer disclaiming the term of any patent issuing from this application extending beyond the term of the other patents and applications listed above is provided attached.

CONCLUSION

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell, Ph.D. Reg. No. 36,623 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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